REMARKS

Reconsideration of claims 1-10, 32-34, 36-39, 41 and 45 is respectfully requested.

Applicants respectfully request that dependent claims 7, 36 and 37, not be withdrawn from this application because claims 1 and 6 are generic to claim 7, and claims 36 and 37 are generic to claim 32. The Official Action dated March 14, 2005 requested that the examiner elect a particular embodiment of the claimed invention. Applicant responded by selecting the embodiment depicted in FIG. 4A over that of FIG. 4B and FIG. 5. The only difference between the depicted arrangements is how the layers are arranged within a trench of a dielectric material.

Claim 7 (FIG. 4B) further defines the composite material containing copper and the CoWP film of claims 1 and 6 by adding a cap layer over the CoWP film and having all three layers reside within a trench of a dielectric material.

Claim 36 (FIG. 5) further defines the interconnect structure of claim 32 by adding a CoWP barrier layer to provide a CoWP-Cu-CoWP arrangement.

Claim 37 further defines the interconnect structure of claim 32 by providing an additional cap layer on the metal-Cu-CoWP arrangement. Because all three of the previously withdrawn claims depend from allowed "generic" claims, applicant is entitled to consideration of these claims to additional species which are written in dependent form pursuant to 37 CFR 1.141.

The rejection of claims 1, 5, 6, 8-10, 32, 38, 39, 41 and 45 under 35 USC 102(e) as anticipated by Inoue et al. (US 2003/75808) is respectfully traversed. The Office Action cites to paragraphs [0215] and [0222] of Inoue as support for the recited "13.2 atom percent to 25 atom percent phosphorus" range limitation of the CoWP film. Paragraph [0215] describes an interconnect protective film of CoWP formed by electless process. There is no teaching in [0215] of the recited atomic range of phosphorous.

In accordance with the preceding paragraphs, paragraph [0222] describes the contents of an electroless plating solution that can be used to prepare the electroless CoWP films. The atomic percentage range given, i.e., 5-50 at %, for phosphorous relative to cobalt is the at % range for the concentration of the alloying solution, not the resulting CoWP film. As stated, the

inclusion (content) of P in the plating solution at "5-50% P relative to Co can produce an interconnects protective film."

Because there is no teaching in Inoue of a CoWP film with 13.5 at % to 25 at % phosphorous the rejection is improper. Accordingly, applicants respectfully request that the rejection be withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0510, under Order No. 20140-00308-US1 from which the undersigned is authorized to draw.

Dated: 7-10-06

Respectfully submitted,

By _____
Joseph Barrera
Registration No.: 44,522
CONNOLLY BOVE LODGE & HUTZ LLP
1990 M Street, N.W., Suite 800
Washington, DC 20036
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Applicant